

RED HAT  
**SUMMIT**

# MOBILE IN A CONTAINERS WORLD

A Strategy for Modern App Dev with a Mobile Twist

John Frizelle

Mobile Platform Architect

8th May 2018

 @johnfriz | @RedHatMobile | @RedHatNews



# AGENDA

- **WHY - Modern App Dev**
- **WHO - Personas & Needs**
- **WHAT - Building Blocks**
- **HOW - Technology Stack**

# Digital Transformation

“*Why*”



# From Systems of Record

Siloed Data | Behind Firewall | Waterfall Development



# To Systems of Engagement



# Digital Transformation

Increased Efficiency | Reduced Cost | Rapid Turnaround | Cloud Native



## Mobile: a Catalyst for Digital Transformation





# Digital Transformation: a Catalyst for Modern App Dev

# Modern App Dev Personas & Needs

“Who”



# Business Sponsor



# Project Manager



Project Plan | Quality | Metrics | Analytics



# Security & Compliance

Identity | Encryption | Auditing | Access Control | Data Management

A blurred background image showing several people in an office environment, each working on a laptop. The scene is well-lit with natural light coming from windows in the background.

# Front End Developer



# Back End Developer

Data Storage | Integrations | Performance | Monitoring | Logging | CI/CD



# Mobile Developer

Identity | Push Notification | Offline | UI/UX | SDKs | Debugging | CI/CD



# Citizen Developer



# System Administrator



# Support Agent

Logging | Remote Debug | System Dump | Metrics



# End Users

Feedback Loop | Manage SSO | App Portfolio & Updates | Devices

# CONCLUSIONS

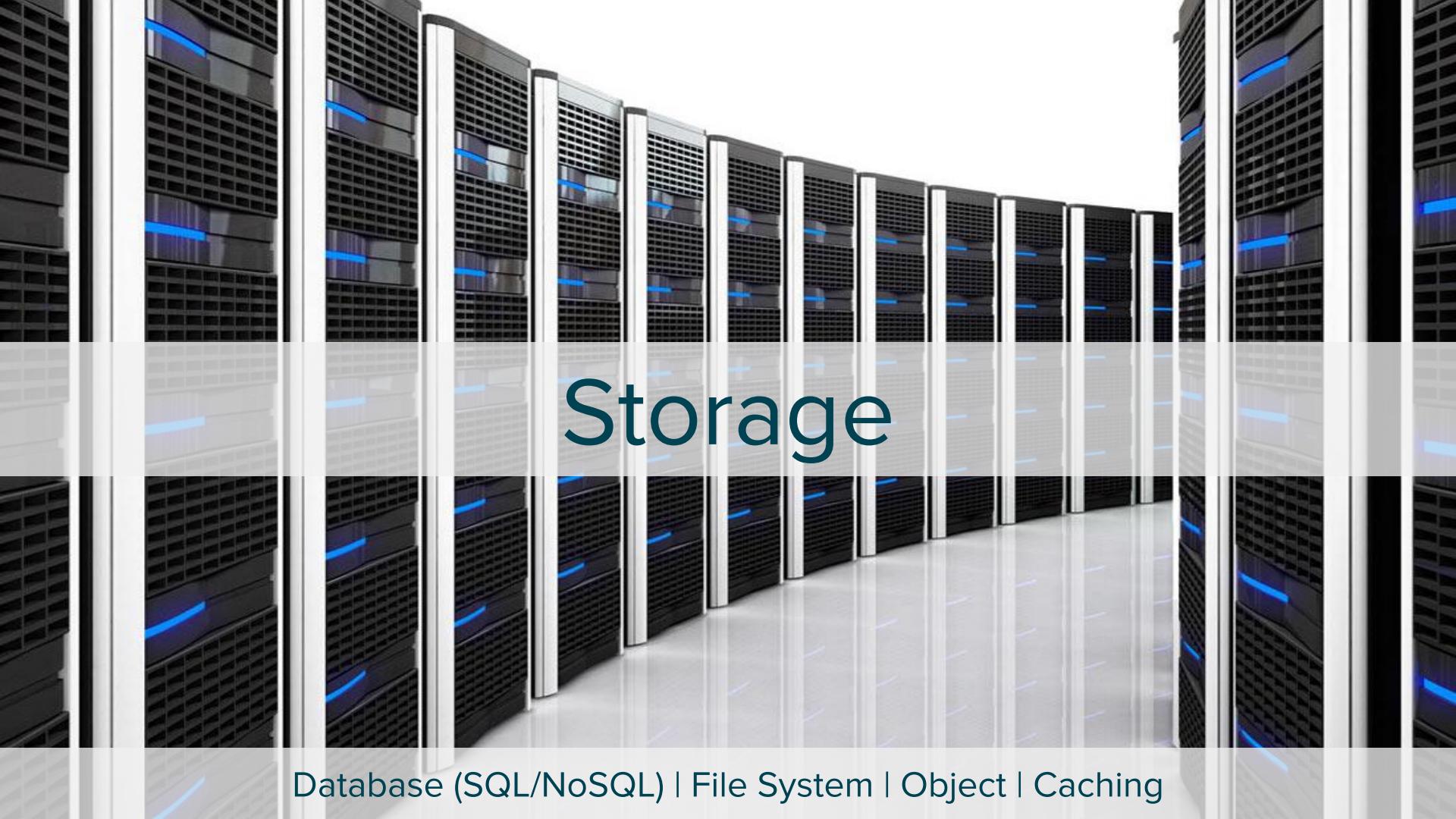
Mobile is part of something much bigger

B.

C.

# Modern App Dev Building Blocks

“*What*”

A photograph of a data center aisle showing a long row of server racks. The racks are black with blue glowing horizontal lines on the front panels. The floor is a light-colored polished surface. The word "Storage" is overlaid in a large, semi-transparent, teal-colored font in the center of the image.

# Storage

Database (SQL/NoSQL) | File System | Object | Caching

# Backend



# Integrations

Backend | API Mapping | Message Queues

A blue-toned background image featuring a silver padlock on the left and a clear globe with a world map on the right. The globe is partially obscured by a semi-transparent white rectangular overlay containing the word 'Security'. The background has a digital, glowing effect with blue dots.

# Security

API Management | User Management | Device Security

# Analytics

Installs | Startups | Active Users | Usage Patterns | A/B Testing

# Monitoring

Health | Logs | Metrics | Performance & Uptime



# Collateral

Documentation | Videos | Templates | Guides | Blogs



# Mobile Client

# CONCLUSIONS

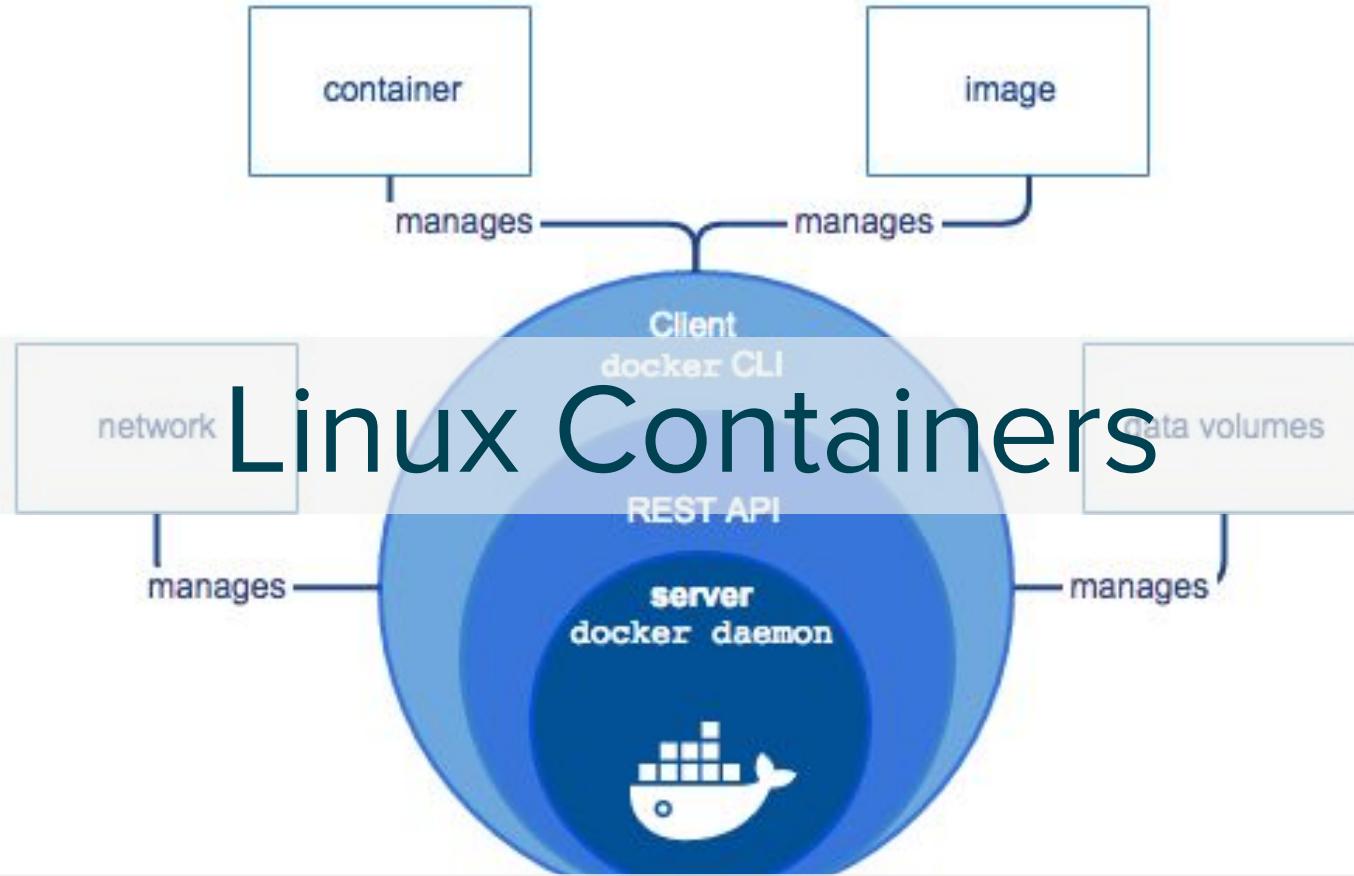
Mobile is part of something much bigger

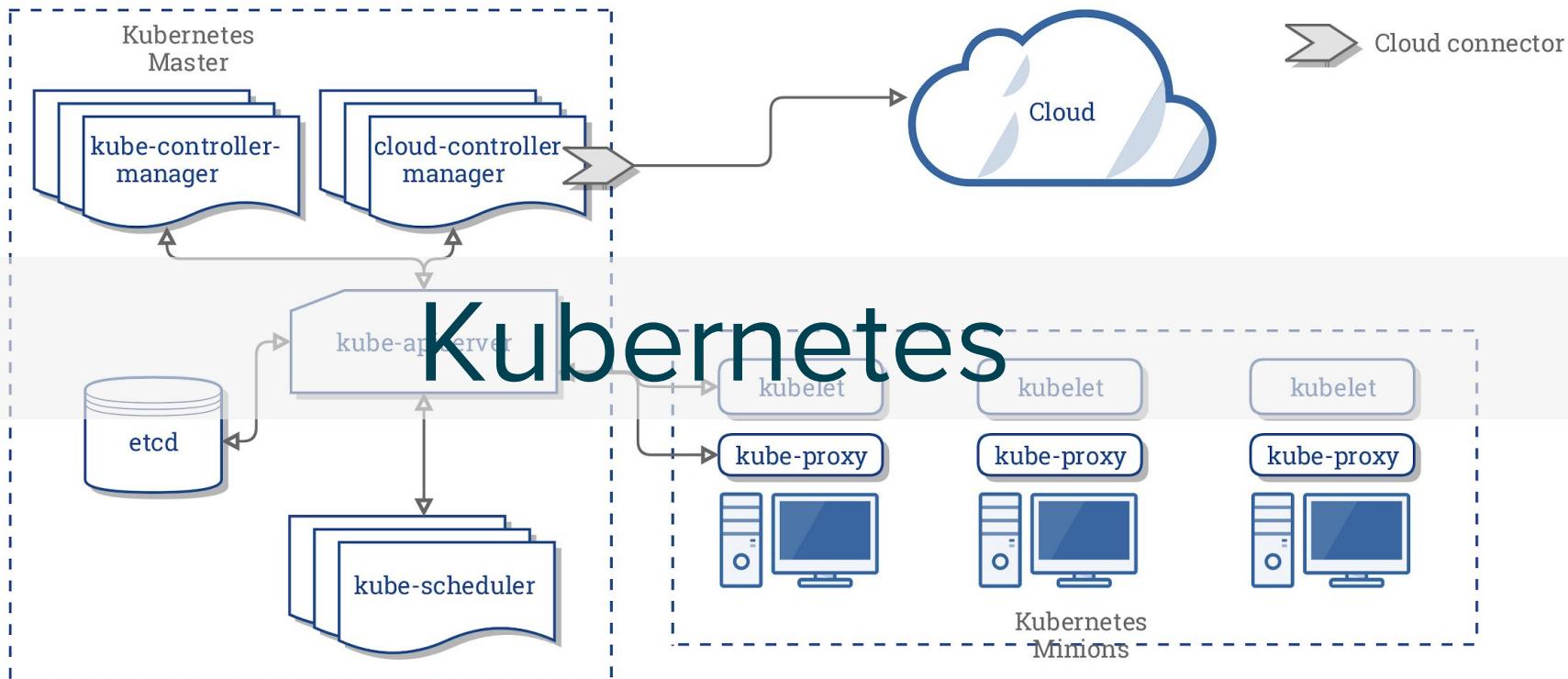
B.

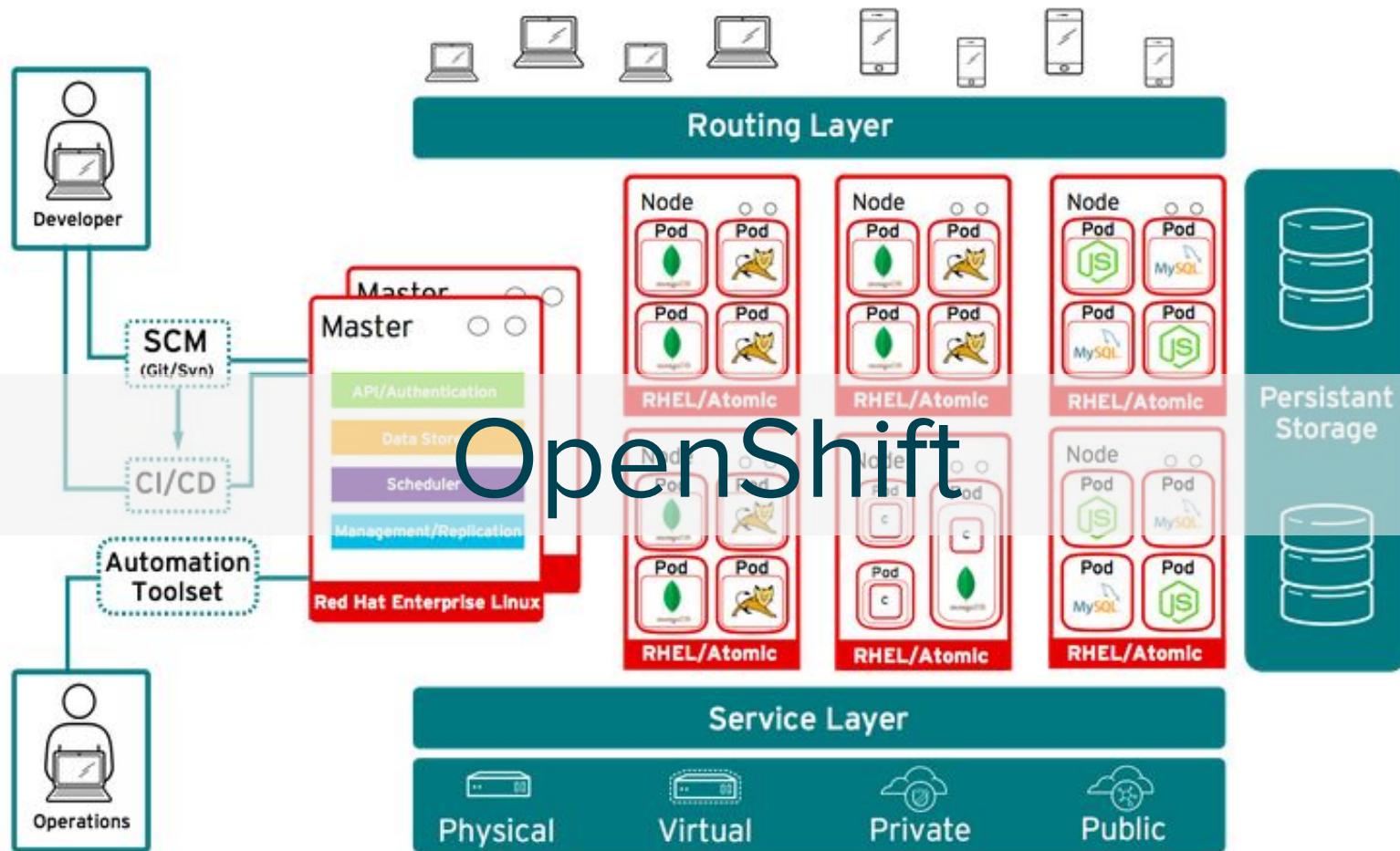
C.

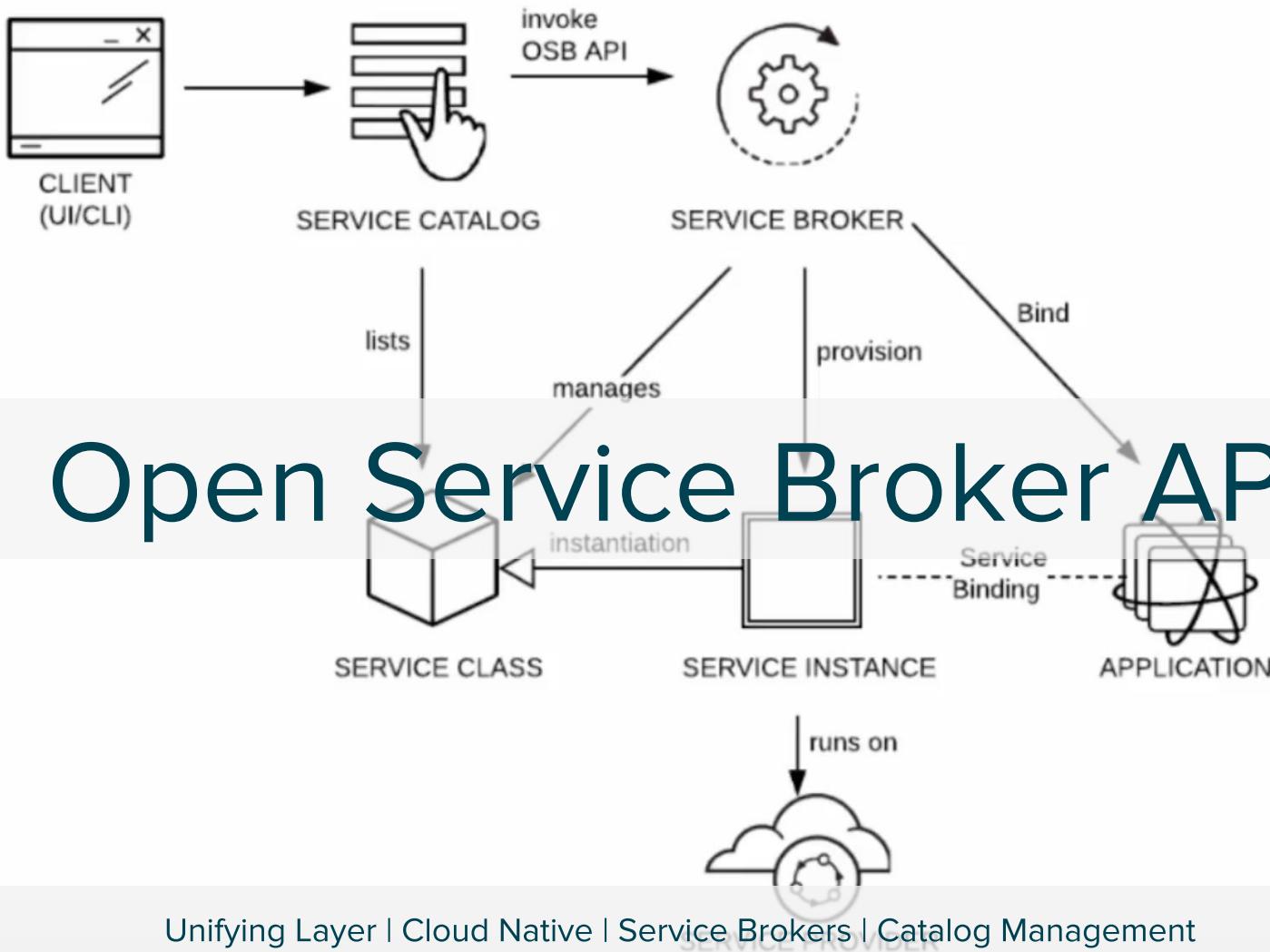
# Technology Stack

“How”







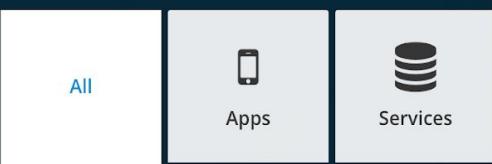


Search Catalog

## Browse Catalog

Deploy Image Import YAML / JSON Select from Project

All Languages Databases Middleware CI/CD Mobile



Filter ▾ 9 Items

# Mobile Services



3Scale



AeroGear UPS



Android App



Cordova App



FeedHenry Sync Server



iOS App



Keycloak



Metrics



Mobile CI/CD

## My Projects

+ Create Project

1 of 1 Projects

View All

## My Project

myproject – created by developer 4 minutes ago

Initial developer project

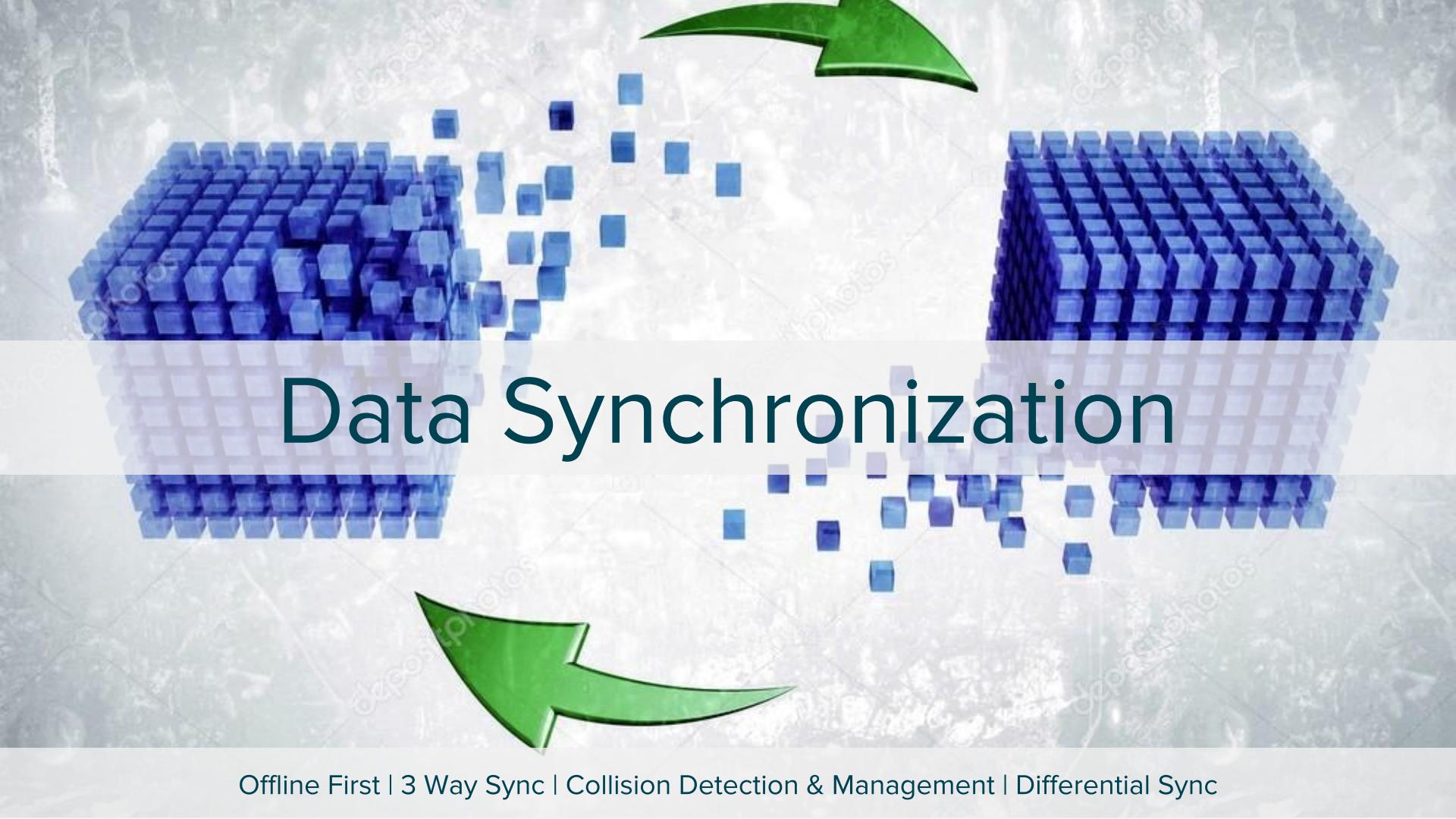
## Getting Started

Take Home Page Tour

- Documentation
- Interactive Learning Portal
- Local Development
- YouTube
- Blog

# Security & Identity Management

Authorization & Authentication | Multi Factor Identity | Single Sign On | Device Security & Trust



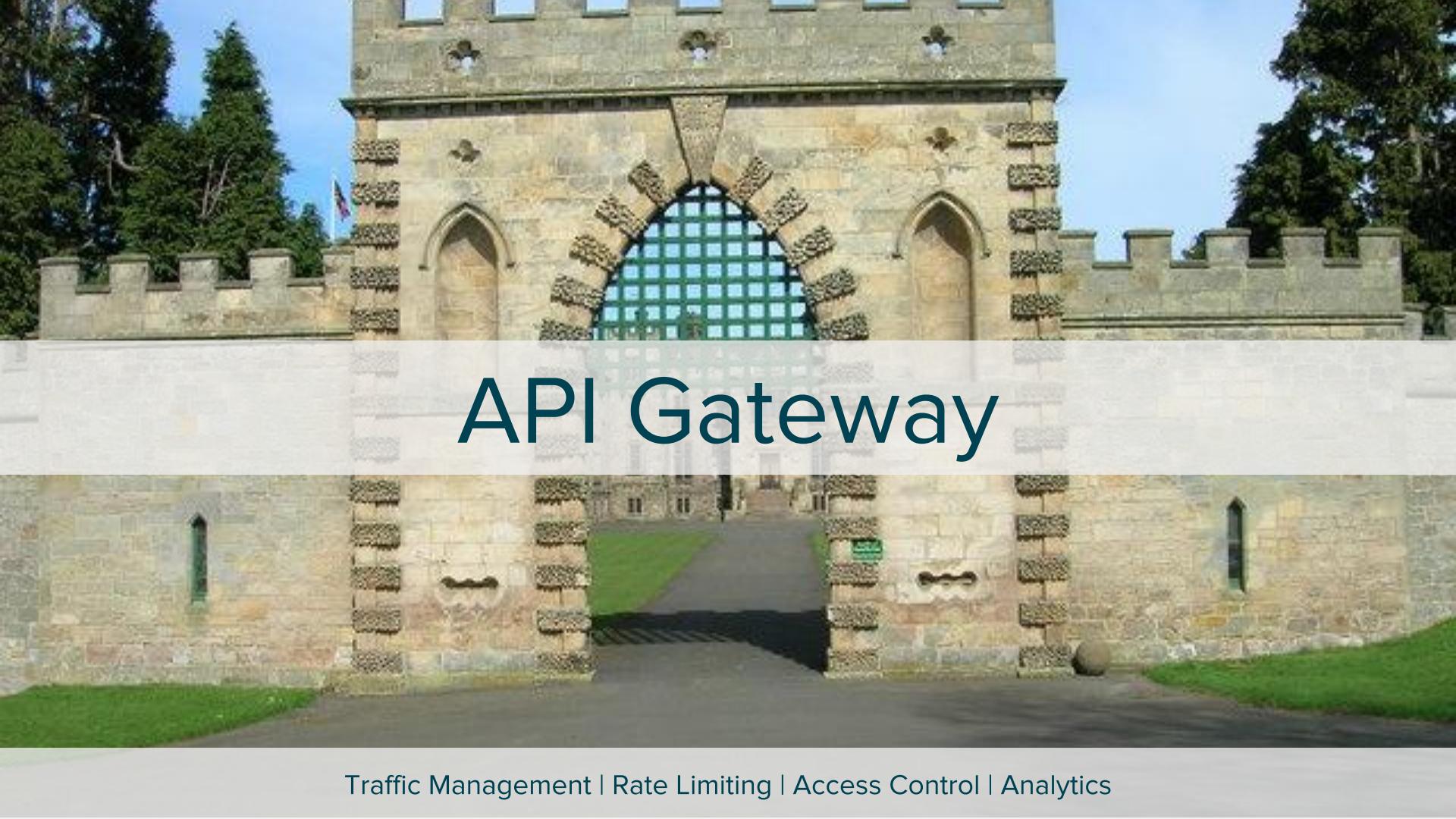
# Data Synchronization

Offline First | 3 Way Sync | Collision Detection & Management | Differential Sync



# Push Notifications

iOS, Android & Web | Real time Stats | Targeted Messages | Certificate Management

A photograph of a large, historic stone castle. The castle features a prominent central tower with a large arched window with a green metal grille. The castle is surrounded by a high stone wall with crenellations. The sky is clear and blue.

# API Gateway

Traffic Management | Rate Limiting | Access Control | Analytics



# Build Automation



iOS & Android | Native & Hybrid | Jenkins Pipelines | Containerized Builds

# Metrics

A close-up photograph of a person's hands interacting with a tablet. The tablet screen displays various data visualizations, including bar charts and line graphs with data labels. The hands are shown in the foreground, with one hand holding a stylus and the other hand resting on the tablet. The overall theme is data analysis and metrics.

A wide-angle, high-angle photograph of a futuristic city. In the foreground, a multi-lane highway with a glowing yellow center line curves through the frame. In the middle ground, a large, illuminated bridge spans a body of water, connecting two parts of the city. The background is filled with a dense cluster of skyscrapers, some with unique, angular designs. The sky is a vibrant blue with scattered white clouds. The overall atmosphere is one of a high-tech, advanced urban environment.

# The Future

A close-up photograph of several people's hands stacked together in a circular pattern. The hands belong to people of various skin tones, including light-skinned and dark-skinned individuals. The hands are resting on a light-colored, possibly wooden, surface. The background is slightly blurred, showing more of the hands and some clothing.

Join Us - [github.com/aerogear](https://github.com/aerogear)



# THANK YOU



[plus.google.com/+RedHat](https://plus.google.com/+RedHat)



[facebook.com/redhatinc](https://facebook.com/redhatinc)



[linkedin.com/company/red-hat](https://linkedin.com/company/red-hat)



[twitter.com/RedHat](https://twitter.com/RedHat)



[youtube.com/user/RedHatVideos](https://youtube.com/user/RedHatVideos)

*Images may be subject to copyright*